## REMARKS

With entry of this amendment, claims 1, 4 and 5 are under examination. Claims 2-3 and 6-10 have been cancelled and claim 1 has been amended to recite sequences that are at least 98% identical to SEQ ID NO:1. Support for this amendment can be found at page 5, paragraph 16, of the specification. The claims have also been amended to remove nonelected subject matter (SEQ ID NO:3), and to overcome the indefiniteness rejection. No new matter has been added. Reconsideration is requested.

Claims 1-4, 6-8 and 10 were rejected under 35 USC §112, first paragraph, as containing subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors had possession of the claimed invention at the time the application was filed. It is the Examiner's position that only SEQ ID NO:1 and sequences that encode an identical protein product meet the written description requirement. Applicants respectfully submit that claim 1, as amended, and claim 4, dependent therefrom, clearly meet the written description requirement. The scope of the amended claim includes only those nucleic acid sequences that are 95% identical to SEQ ID NO:1, or are complementary thereto, or encode an identical polypeptide product. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 1-8 and 10 were rejected under 35 USC §112, first paragraph, as containing subject matter that is not enabled. It is the Examiner's view that the claims are overly broad, and that only SEQ ID NO:1 and sequences that encode an identical protein product are enabled. This rejection is traversed for the following reasons.

The Examiner states that claims 1-5 encompass any and all fragments of the full-length protein encoded by SEQ ID NO:1. This is incorrect. Claims 1, 4 and 5, now pending, encompass, *inter alia*, sequences that due to the degeneracy of the genetic code encode an identical polypeptide product. No mention is made of fragments. It is respectfully submitted that no undue experimentation would be required to make and use the presently claimed invention. Reconsideration and withdrawal of the rejection is respectfully requested.

Claims 1-4 have been rejected under 35 USC §112, second paragraph, as being indefinite. Claims 1 and 4 have been amended, and are believed to be free of the rejection. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 1-5 were rejected under 35 USC § 102(a) as being anticipated by Yahyawi. It is the Examiner's position that Yahyawi teaches a nucleic acid that encodes polypeptides that are identical to polypeptides encoded by SEQ ID NO:1. This rejection is traversed for the following reasons.

Sequence BF607870 by Yahyawi is a 724 base pair long EST (Expressed Sequence Tag) isolated from mouse 9-day fetus cDNA library with no specified tissue or cell type origin. This sequence does not encode a polypeptide that is identical to that encoded by SEQ ID NO:1. Furthermore, this sequence has no inferred or experimentally deduced hypothetical or other function, and does not represent full length mRNA for *Hepp* containing complete non-coding (5' UTR and 3'UTR) and coding nucleic acid sequence. As such sequence BF607870 is filed in the UniGene database under the UniGene Cluster Mm.28595 representing *Hepp* (http://www.ncbi.nlm.nih.gov/UniGene/clust.cgi?ORG=Mm&CID=28595) as one of the

numerous deposited ESTs. Finally, it is respectfully submitted that the sequence disclosed by Yahyawi is not 98% identical to SEQ ID NO:1, as presently recited in claim 1. Reconsideration and withdrawal of the rejection is respectfully requested.

Claims 6-10 were rejected under 35 USC § 102(a) as being anticipated by Kargul (BG069072), Kargul (BG082096) or Arakawa (BB055758). Claims 6-10 have been cancelled, thereby rendering this rejection moot.

Claims 1-5 were rejected under 35 USC § 102(b) as being anticipated by Gallatin. It is the Examiner's position that Gallatin teaches a nucleic acid that encodes polypeptides that are identical to polypeptides encoded by SEQ ID NO:1. This rejection is traversed for the following reasons.

As presently amended, claims 1-5 encompass, *inter alia*, nucleic acids that encode a polypeptide identical to the polypeptide encoded SEQ ID NO:1. Sequence 45 by Gallatin et al. represents Human 2 Integrin Alpha Subunit that obviously DOES NOT represent *Hepp* gene or protein, and has very little or no similarity (in terms of the length of CDS, cDNA, and peptide, and the composition of the nucleic and amino acid sequences) to *Hepp* gene or protein. The Gallatin sequence is certainly not 95% identical to SEQ ID NO:1, nor complementary to any such sequence. Reconsideration and withdrawal of the rejection are respectfully requested.

The typographical error in claim 5 has been corrected.

All objections and rejections having been addressed, it is respectfully submitted that this application is in condition for allowance, and Notice to that effect is respectfully requested.

Respectfully submitted,

Date: July 3, 2003

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**Version With Markings To Show Changes Made**

1. An isolated nucleic acid comprising a sequence that is at least [85%] 98% identical to SEQ ID NO:1 [or SEQ ID NO:3], or a sequence that is complementary thereto, or a sequence that due to the degeneracy of the genetic code encodes an identical polypeptide product to that encoded by SEQ ID NO:1.

4. The nucleic acid of claim [3] 1 comprising a sequence that is at least 99% identical to SEQ ID NO:1 [or SEQ ID NO:3], or a sequence that is complementary thereto or a sequence that due to the degeneracy of the genetic code encodes an identical polypeptide product to that encoded by SEQ ID NO:1.

5. The nucleic acid of claim 4 comprising a sequence that is identical to SEQ ID NO:1 [or SEQ ID NO:3], or a sequence that is complementary thereto or a sequence that due to the degeneracy of the genetic code encodes an identical polypeptide product to that encoded by SEQ ID NO:1.